

2007 Energy Bill Detailed Summary

Title 1: Energy Security Through Improved Vehicle Fuel Economy

Subtitle A- Increase Corporate Average Fuel Economy Standards

Section 101: Short Title

This section directs Subtitle A as the 'Ten-in-Ten Fuel Economy Act'.

Section 102-103: Average Fuel Economy Standards for Automobiles and Certain Other Vehicles

This section directs DOT to set the maximum feasible CAFE standards for cars and separate standards for light trucks for 2011-2030, achieving a total fleet average fuel economy of at least 35 mpg by 2020. There also is a backstop standard for domestic cars of each manufacturer of 27.5 mpg and 92% of industry average fuel economy.

Standards are to be set as a function of vehicle attributes (such as size) and include passenger vehicles (not heavier trucks) up to 10,000 lbs.

Section 104: Credit Trading Program

This section allows DOT to establish a CAFÉ credit trading program between manufacturers, and allows manufacturers to carry forward earned credits for 5 rather than 3 years. In addition, automakers would have the ability to borrow against their future fuel economy gains for up to three years

Also allows a credit trading program between fleets of the same manufacturer within certain limits. The maximum increase in transferred credits is 1 mpg for model years 2011-13, 1.5 mpg for model years 2014-17, and 2 mpg for model year 2018 and subsequent model years.

Section 105: Consumer Information

This section directs DOT to modify vehicle labels with a rating based on fuel economy and emissions, and to designate vehicles that can run on alternative fuel.

Section 106: Continued Applicability of Existing Standards

This section makes clear that no amendments to this subtitle will affect the application of current average fuel economy standards for automobiles manufactured prior to model year 2011.

Section 107: National Academy of Sciences Studies

This section directs the Secretary of Transportation to work with the National Academy of Sciences to develop a report that evaluates vehicle fuel economy standards through assessing the automotive technologies and costs to reflect developments since the Academy's 2002 report; the report shall contain an analysis of existing and potential technologies that may be practicable; an analysis of how these technologies can be integrated; and an assessment of how these technologies can be used to meet the new fuel

economy standards. Directs the Academy to update the report every five years beginning in 2025.

Section 108: National Academy of Sciences Study of Medium-Duty and Heavy-Duty Truck Fuel Economy

This section directs the Secretary of Transportation to work with the National Academy of Sciences to develop a report that evaluates vehicle fuel economy standards for medium-duty and heavy-duty trucks.

Section 109: Extension of Flexible Fuel Vehicle Credit Program

This section extends the flexible fuel vehicle credit program up to 1.2 mpg for flexible fuel vehicles, with a slow phase out from 2015-2020.

Section 110: Periodic Review of Accuracy of Fuel Economy Labeling Procedures

This section directs EPA to reevaluate the fuel economy tests used for labels and public information every 5 years.

Section 111: Consumer Tire Information

This section directs DOT to establish a tire fuel efficiency rating system, test method, and consumer information program

Section 112: Use of Civil Penalties for Research and Development

This section stipulates that fines, penalties, and other funds obtained through CAFÉ enforcement actions be used by DOT half for rulemaking and half for grants for the upgrading existing manufacturing plants to produce advanced vehicles.

Section 113: Exemption From Separate Calculation Requirement

This section repeals law that allowed manufacturers to file a petition for exemption from the requirement of separate calculations through EPA. Exemptions provided under this law will remain in effect through model year 2013 and allows any manufacturer holding an exemption to accrue and use credits for exceeding average fuel economy standards.

Subtitle B- Improved Vehicle Technology

Section 131: Transportation Electrification

This section authorizes \$90 million per year in 2008-2012 for DOE grants for plug-in electric drive vehicles, \$95 million per year in 2008-12 for electric transportation grants and education program.

Section 132: Domestic Manufacturing Conversion Grant Program

This section modifies a grant program authorized in the Energy Policy Act of 2005 to include production of parts for hybrid and advanced diesel vehicles.

Section 133: Inclusion of Electric Drive In Energy Policy Act of 1992

This section allows alternative fuel providers and state fleets to use hybrid electric vehicles and other oil-saving technologies to comply with Energy Policy Act of 1992 alternative fuel vehicle fleet requirements.

Section 134: Loan Guarantees for Fuel-Efficient Automobile Parts Manufacturers

This section makes facilities who manufacture fuel-efficiency vehicles or parts, including electric drive and advanced diesel, eligible for loan guarantees under Title XVII of Energy Policy Act of 2005.

Section 135: Advanced Battery Loan Guarantee Program

This section authorizes DOE to establish a program to provide loan guarantees for manufacturing facilities that manufacture advanced vehicle batteries and battery systems, including advanced lithium ion batteries and hybrid electrical system and component manufacturers and software designers.

Section 136: Advanced Technology Vehicles Manufacturing Incentive Program

This section authorizes DOE awards of up to 30% of costs for manufacturing facilities of clean and efficient vehicles and their parts. Automakers are eligible only if their average fuel economy is no worse than in 2005.

Subtitle C- Federal Vehicle Fleets

Section 141- Federal Vehicle Fleets

This section requires federal agencies and Congress to purchase light- and medium-duty vehicles with low greenhouse gas emissions, based on EPA guidance and state standards. Allows for exceptions if no vehicle meets the needs of the agency or if the agency can reduce its oil consumption in a more cost-effective way.

Section 142- Federal Fleet Conservation Requirements

This section directs DOE to issue regulations requiring federal fleets to reduce oil use by 20% and increase alternative fuel use by 10% from a 2005 baseline by October 1, 2015, and to include a requirement to purchase energy-efficient replacement tires.

Title 2: Energy Security Through Increased Production of Biofuels

Subtitle A- Renewable Fuel Standard

Section 201-202- Renewable Fuel Standard

This section would expand the renewable fuels standard to 9 billion gallons in 2008, with an increase of up to 36 billion gallons by 2022. Also promotes the development of cellulose ethanol by requiring 21 billion gallons of advanced biofuels by 2022.

Section 203- Study of Impact on Renewable Fuel Standard

This section directs the Secretary of Energy, with the Secretary of Agriculture, and the Administrator of the EPA, to arrange with the National Academy of Sciences to conduct a study to assess the impact Clean Air Act requirements on industry related to the production of feed grains, livestock, food, forest products, and energy. This study shall include participation from industry representatives.

Section 204- Environmental and Resource Conservation Impacts

This section requires that after 3 years and every 3 years after, the EPA Administrator, the Secretary of Agriculture, and the Secretary of Energy shall report to Congress on the impact of the Clean Air Act requirements related to environmental issues, resource conservation issues, and the growth and use of cultivated invasive and noxious plants.

Section 205- Biomass Based Diesel and Biodiesel Labeling

This section requires that diesel fuel pumps be labeled in a manner that informs consumers of the percent of biomass-based diesel or biodiesel that is contained in the blend offered for sale.

Section 206- Study of Credits for Use of Renewable Electricity in Electric Vehicles

This section requires the EPA to conduct a study on the feasibility of issuing credits to electric vehicles powered by electricity produced from renewable energy sources.

Section 207- Grants for Production of Advanced Biofuels

This section authorizes \$500 million for DOE to establish a grant program to encourage the production of advanced biofuels. These grants are to be awarded for proposals for advanced biofuels with the greatest reduction in lifecycle greenhouse gas emissions compared to 2005 emissions, and grants are not allowed for projects that do not achieve at least an 80 percent reduction in such lifecycle greenhouse gas emissions.

Section 208- Integrated Consideration of Water Quality in Determinations on Fuels and Fuel Additives

This section modifies provisions of the Clean Air Act to include water pollution by which the Administrator may regulate control or prohibit the manufacturing of any fuel or fuel additive for use that may contribute or cause danger to the public health or welfare.

Section 209- Anti-Backsliding

This section requires the EPA, within 3 years, to promulgate fuel regulations to implement appropriate measures to mitigate, to the greatest extent achievable, any adverse impacts on air quality. These measures are dependant upon the results of an EPA study required by this section.

Section 210- Effective Date, Savings Provision, and Transition Rules

This section stipulates that for 2008, transportation fuel sold in the United States and produced from facilities that begin construction after enactment shall be treated as renewable fuel within the Clean Air Act, only if it achieves at least 20 percent reduction in lifecycle greenhouse gas emissions compared to baseline lifecycle greenhouse gas emissions.

For 2008-2009, any ethanol plant that is fired with natural gas, biomass, or any combination is also deemed to be in compliance with the 20 percent reduction requirement.

Subtitle B- Biofuels Research and Development

Section 221- Biodiesel

This section requires DOE, with the EPA to submit a report to Congress on any research and development challenges inherent in increasing the proportion of diesel fuel sold in United States that is biodiesel.

Section 222- Biogas

This section requires DOE, with the EPA to submit a report to Congress on any research and development challenges inherent in increasing the amount of transportation fuels sold in United States that are fueled with biogas or a blend of biogas and natural gas.

Section 223- Grants for Biofuel Production Research and Development in Certain States

This section authorizes \$25 million every year for FY08-FY10 for the DOE to provide grants to eligible entities for research, development, demonstration, and commercial application of biofuel production technologies in States with low rates of ethanol production, including low rates of production of cellulose biomass ethanol.

Section 224- Biorefinery Energy Efficiency

This section requires DOE to establish a program of research, development, demonstration, and commercial application for increasing energy efficiency and reducing energy consumption in the operation of biorefinery facilities and technologies and processes to enable biorefineries that exclusively use corn grain or corn starch as a feedstock to produce ethanol to be retrofitted to accept a range of biomass.

Section 225- Study of Optimization of flexible Fuel Vehicles to use E-85 Fuel

This section requires the DOE, along with DOT and EPA to study whether optimizing flexible fueled vehicles to operate using E-85 fuel would increase the fuel efficiency of flexible fueled vehicles.

Section 226- Study of Engine Durability and Performance Associated with the Use of Biodiesel

This section requires DOE, in consultation with EPA, to study the effects on the use of biodiesel on the performance and durability of engines and engine systems, including an assessment of whether the use of biodiesel lessens the durability and performance of conventional diesel engines and engine systems and an assessment of the affects with respect to biodiesel blends at varying concentrations.

Section 227- Study of Optimization of Biogas Used in Natural Gas Vehicles

This section requires DOE, with DOT and EPA to study methods of increasing the fuel efficiency of vehicles using biogas by optimizing natural gas vehicle systems that can operate on biogas, including the advancement of vehicle fuel systems and the combination of hybrid-electric and plug-in hybrid electric drive platforms with natural gas vehicle systems using biogas.

Section 228- Algal Biomass

This section requires DOE to report to Congress on the research and development that is being conducted on the use of algae as a feedstock for the production of biofuels.

Section 229- Biofuels and Biorefinery Information Center

This section requires DOE, with the Secretary of Agriculture, to establish a biorefinery information center.

Section 230- Cellulosic Ethanol and Biofuels Research

This section authorizes \$50 million for FY08 for DOE to make grants for cellulosic ethanol and biofuels research and development to 10 eligible entities.

Section 231- Bioenergy R&D, Authorization of Appropriation

This section authorizes \$963 million for FY2010 for renewable energy research, development, demonstration, and commercial application activities.

Increases FY08 funding for bioenergy to \$377 million, FY09 funding to \$398 million, and adds \$419 million for FY10.

Section 232- Environmental Research and Development

This section changes existing law that adds environmental science to the list of research, development, and demonstration programs to support the energy, national security, and environmental missions at DOE.

This section also stipulates that the programs established should have the goal of developing technologies and methods that can facilitate the production of fuels in sustainable production systems that reduce greenhouse gas emissions and to develop cellulosic and other feedstocks.

Section 233- Bioenergy Research Centers

This section requires DOE to establish 7 bioenergy research centers.

Section 234- University Based R&D Grant Program

This section establishes a grant program through DOE for projects submitted by universities, up to \$2 million, to conduct research and development of renewable energy technologies.

Subtitle C- Biofuels Infrastructure

Section 241- Prohibition on Franchise Agreement Restrictions Related to Renewable Fuel Infrastructure

This section prohibits any franchise agreement to contain any provision that restricts installing a renewable fuel pump or tank, converting an existing tank or pump for renewable fuel use, advertising the sale of any renewable fuel, selling renewable fuel on the premises, purchasing renewable fuel, listing renewable fuel availability prices, and allowing for payment of renewable fuel with a credit card.

Section 242- Renewable Fuel Dispenser Requirements

This section directs the DOE and DOT to determine and report to Congress every year on the market penetration for flexible-fuel vehicles in use.

Section 243- Ethanol Pipeline Feasibility Study

This section instructs and authorizes \$1 million for FY08-FY09 for DOE and DOT to study the feasibility of the construction of pipelines dedicated to the transportation of ethanol.

Section 244- Renewable Fuel Infrastructure Grants

This section authorizes \$200 million for FY08-FY14 for DOE to establish a grant program to provide assistance to retail and wholesale motor fuel dealers or others for the installation, replacement, or conversion of motor fuel storage and dispensing infrastructure to be used exclusively to store and dispense renewable fuel blends.

Section 245- Study of the Adequacy of Transportation of Domestically-Produced Renewable Fuel by Railroads and other Modes of Transportation

This section requires the DOE and DOT to jointly conduct a study on the adequacy of transportation of domestically-produced renewable fuels by railroads and other modes of transportation determined by DOE and DOT.

Section 246- Federal Fleet Fueling Centers

Requires the head of each federal agency to install at least 1 renewable fuel pump at each federal fleet fueling center. In addition, requires the President to report to Congress on the progress toward this goal.

Section 247- Standard Specifications for Biodiesel

This section amends the Clean Air Act, related to conversion assistance for cellulosic biomass, waste-derived ethanol, approved renewable fuels by giving the EPA rulemaking authority, under certain conditions, to establish a uniform per gallon fuel standard for such fuel and designated an identification number so that vehicle manufacturers are able to design engines to use fuel meeting such standard.

Section 248- Biofuels Distribution and Advanced Biofuels Infrastructure

This section directs DOE and DOT to carry out a program of research, development, and demonstration relating to existing transportation fuel distribution infrastructure and new alternative distribution infrastructure.

Subtitle D- Environmental Safeguards

Section 251- Waiver for Fuel or Fuel Additives

This section amends the Clean Air Act to allow the EPA to waive the prohibition that a manufacturer introduce a fuel or fuel additive that is not substantially similar to any fuel or fuel additive utilized, unless the EPA determines it will not cause or contribute to the failure of any emission control device or system to achieve compliance by the vehicle's certified emission standards.

Title 3: Energy Savings Through Improved Standards for Appliance and Lighting

Subtitle A- Appliance Energy Efficiency

Section 301- External Power Supply Efficiency Standards

This section establishes new external power supplies standards based upon standards adopted in various states

Section 302- Updating Appliance Test Procedures

This section directs DOE to review test procedures for all covered products at least every 7 years.

Section 303- Residential Boilers

This section updates existing standards on residential boilers.

Section 304- Furnace Fan Standard Process

This section directs DOE to set a standard for electricity use by furnaces (for furnace fans) by December 31, 2013.

Section 305- Improving Schedule for Standards Updating and Clarifying State Authority

This section directs DOE to review each standard within 6 years of the last final rule or 3 years of the last review, and if warranted to set a standard within 2 more years. Sets a timetable for adopting standards for certain products set in the ASHRAE model

commercial building energy code. Allows standards to become effective 3 years after the final rule (now is 5 years for some products).

Section 306- Regional Standards for Furnaces, Central Air Conditioners, and Heat Pumps

This section authorizes DOE to establish standards that vary in up to two regions for furnaces and up to three regions for central air conditioners and heat pumps. Directs DOE to issue an enforcement plan for each regional standard, and directs the Federal Trade Commission to establish labeling and disclosure requirements.

Section 307- Procedure for Prescribing New or Amended Standards

This section repeals requirement for an advanced notice of proposed rulemaking (ANOPR) when setting a new or amended standard.

Section 308- Expedited Rulemakings

This section allows DOE to issue as a direct final rule a standard recommended jointly by manufacturers, states, and efficiency advocates. If there are adverse public comments, the direct final rule is to be withdrawn.

Section 309- Battery Chargers

This section requires DOE to complete rulemakings to determine revised standards for battery chargers by July 2011.

Section 310- Standby Mode

This section requires that future standards for products must include their energy use when they are in standby mode.

Section 311- Energy Standards for Home Appliances

This section establishes new and updated appliance efficiency standards based on agreements between manufacturers and efficiency advocates for residential clothes washers, dishwashers, and humidifiers. This provision also directs DOE to update the standard for refrigerators and freezers.

Section 312- Walk-In Coolers and Walk-In Freezers

This section establishes new and updated standards for walk-in coolers and walk-in freezers based upon standards in California, Maryland, and Rhode Island.

Requirements include all manufactured, beginning in 2009, have automatic door closers that firmly close all walk-in doors that have been closed to within 1 inch of full closure, exceptions include doors wider than 3 feet 9 inches or taller than 7 feet, have strip doors, spring hinged doors, or other method of minimizing infiltration when doors are open; contain wall, ceiling, and door insulation of at least R-25 for coolers and R-32 for freezers, exceptions extend to glazed portions of doors nor to structural members; contain floor insulation of at least R-28 for freezers; and others.

Section 313- Electric Motor Efficiency Standards

This section establishes new and updated standards for electric motors, including U-Frame motors, A Design C Motors, close-coupled pump motors, footless motors, vertical solid shaft normal thrust motor, 8-pole motor, and a poly-phase motor with voltage of not more than 600 volts.

Section 314- Standards for Single Package Vertical Air Conditioners and Heat Pumps

This section adopts ASHRAE standards for small commercial air conditioners under 65,000 Btu capacity and for single package vertical units.

Section 315- Improved Energy Efficiency for Appliances and Buildings in Cold Climates

This section authorizes DOE research and rebates for technologies that improve the energy efficiency of appliances and mechanical systems in cold climates.

Section 316- Technical Corrections

This section makes technical corrections to Energy Policy Act of 2005 provisions on ceiling fans, fluorescent lamps, and mercury vapor lamp ballasts.

Subtitle B- Lighting Energy Efficiency

Section 321- Efficient Light Bulbs

This section directs DOE to set performance standards for general service light bulbs with 25-30% savings compared to traditional incandescent bulbs by 2012 to 2014, and allows DOE to set the 2020 standard. This section also allows California and Nevada to adopt the first standards one year early and the 2020 standard starting in 2018. Directs research, market tracking, and reports, and directs the Federal Trade Commission to review labeling.

Section 322- Incandescent Reflector Lamp Efficiency Standards

This section expands the types of incandescent reflector lamps covered by efficiency standards prescribed in the Energy Policy Act of 1992.

Section 323- Public Building Energy Efficiency and Renewable Energy Systems

This section directs the GSA to set minimum energy-efficiency and renewable energy performance requirements for leased space, to estimate energy performance in the prospectus submitted to Congress, and to make energy efficiency and renewable energy an evaluation factor for leases.

Section 324- Metal Halide Lamp Fixtures

This section sets a new federal standard for metal halide lamp fixtures, similar to those adopted by various states.

Section 325- Energy Efficiency Labeling for Consumer Electronic Products

This section directs the Federal Trade Commission (FTC) to require energy use labels for consumer electronics (televisions, personal computers and monitors, cable and satellite set-top boxes, and digital video recorders) when test procedures are available and unless determined not to be feasible. FTC may add product categories and may change the label for these products.

Title 4- Energy Savings in Buildings and Industry

Subtitle A- Residential Building Efficiency

Section 411- Reauthorization of Weatherization Assistance Program

This section reauthorizes the Weatherization Assistance Program at \$750 million in 2008, rising to \$1.4 billion in 2012. Makes Puerto Rico eligible for the program and includes pilot program focusing on key energy-saving components and grants for materials, benefits, and technologies not currently covered under the program, with up to 2% of funds in years in which funding is over \$275 million.

Section 412- Study of Renewable Energy Rebate Programs

This section requires DOE to report to Congress to study the rebate programs established within the Energy Policy Act of 2005 (let's use this reference throughout).

Section 413- Energy Code Improvements Applicable to Manufactured Housing

This section directs DOE, after consultation with the Department of Housing and Urban Development, to set a standard for manufactured housing at least as stringent as the IECC national model code.

Subtitle B- High-Performance Commercial Buildings

Section 421- Commercial High-Performance Green Buildings

This section establishes an Office of Commercial High-Performance Green Buildings in EERE, and an industry Green Building Partnership Consortium.

Section 422- Zero Net Energy Commercial Buildings Initiative

This section authorizes a Zero-Net-Energy Commercial Buildings Initiative, to be run by the DOE Office of Commercial High-Performance Green Buildings established in Sec. 421 and an industry consortium, with the goal to develop and disseminate technologies, practices, and policies for net-zero-energy commercial buildings for all new commercial buildings by 2030, half of commercial building stock by 2040, and all commercial buildings by 2050. This section also authorizes appropriations in the amount of \$20 million for FY08, \$50 million for FY09-FY10, \$100 million for FY11-FY12, and \$200 million for FY13-FY18.

Section 423- Public Outreach

This section directs the Commercial Director and Federal Director, in coordination with the Consortium, established in Section 421, to carry out public outreach activities to inform individuals and entities of the information and services available.

Subtitle C- High-Performance Federal Buildings**Section 431- Energy Reduction Goals for Federal Buildings**

This section accelerates targets for energy use reductions in federal buildings to 3% per year for FY08-FY15, ending in a 30% reduction in energy intensity by 2015, consistent with Executive Order 13423.

Section 432- Management of Energy and Water Efficiency in Federal Buildings

This section requires that for large buildings (including at least 75% of agency building energy use), agencies must designate an energy manager, do energy and water evaluations every 4 years for approximately 25% of the facilities of each agency, including recommissioning measures, may implement within 2 more years all identified measures that are life-cycle cost-effective, and are required to do follow-up, while developing uniform guidelines, with OMB including implementation in its scorecards. Allows appropriations and private financing to be combined to fund these activities.

Section 433- Federal Building Energy Efficiency Performance Standards

This section requires new federal buildings, if feasible, to reduce fossil fuel consumption by 55% in 2010, and rising to 100% by 2030.

Section 434- Management of Federal Building Efficiency

This section requires large capital energy investments in federal facilities to be the most energy-efficient that is cost-effective. Also requires federal agencies to meter natural gas, steam, chilled water, and water, as well as electricity.

Section 435- Leasing

This section requires federal agencies to lease space in buildings that have earned the Energy Star label in the previous year, with certain exceptions.

Section 436- High-Performance Green Federal Buildings

This section establishes an Office of Federal-High Performance Green Buildings within GSA. The Federal Director is directed to conduct analysis, guidance, and training on life-cycle costing for green buildings, identify green building incentives through recognition awards and retention of savings, and other duties.

Section 437- Federal Green Building Performance

This section directs the Comptroller General of the United States to conduct an audit of the implementation of the High-Performance Federal Buildings and submit to the Federal Director, the Advisory Committee, GSA, and Congress on the results.

Section 438- Storm Water Runoff Requirements for Federal Development Projects

This section requires that any sponsor of any development or redevelopment project involving a Federal facility with a footprint that exceeds 5,000 square feet shall use site planning, design, construction, and maintenance strategies for the property to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow.

Section 439- Cost-Effective Technology Acceleration Program

This section directs GSA to implement a program for maximum feasible replacement in its buildings.

Section 440- Authorization of Appropriations

This section authorizes \$4 million a year for FY08-FY12 for the management of federal building efficiency and the cost-effective technology acceleration program.

Section 441- Public Building Life-Cycle Costs

This section extends the period for life-cycle cost accounting for federal buildings to 40 years.

Subtitle D- Industrial Energy Efficiency

Section 451- Industrial Energy Efficiency

This section directs EPA to survey and create a registry of sites where recoverable waste energy and combined heat and power projects may be economically feasible. Authorizes \$100 million in 2008 and \$200 million per year in 2009-2012 for EPA grants for production of electricity and useful thermal energy from waste energy (at \$10 per megawatt-hour or equivalent), and \$10 million per year for grants to states that have achieved 80% recovery of identified opportunities (at \$1000 per megawatt).

This section also requires states and nonregulated utilities to consider a standard for sale of excess power from waste energy recovery projects to the utility or for transport of the electricity to enable sale to a third party, while authorizing \$10 million per year to EERE for Clean Energy Application Centers (formerly CHP Application Centers) in 8 regions.

Section 452- Energy-Intensive Industries Program

This section authorizes \$184 million in FY08 for a DOE RD&D program in cooperation with industry to improve the energy efficiency of data centers, product manufacturing, and food processing. The amount authorized rises to \$190 million in FY09, \$196 million in FY10, \$202 million in FY11, and \$208 million in 2012.

Section 453- Energy Efficiency for Data Center Buildings

This section authorizes a joint DOE-EPA program, to be coordinated by an industry organization, for energy efficiency of data center equipment and buildings, including establishing specifications and benchmarks.

Subtitle E- Healthy High-Performance Schools

Section 461- Healthy High-Performance Schools

This section authorizes \$1 million for FY09 and \$1.5 billion every year for FY10-FY13 for grants to states to provide technical assistance to schools for use in addressing environmental issues and development and implementation of State school environmental health programs, with a 5 year sunset provision.

This section also gives the EPA, along with the Dept. of Education and HHS to issue voluntary guidelines for states to develop and implement an environmental health program for schools.

Section 462- Study of Indoor Environmental Quality in Schools

This section authorizes \$200 thousand a year for FY08-FY12 for EPA, along with the Dept. of Education and DOE to study how sustainable building features such as energy efficiency affect multiple perceived indoor environmental quality stressors on students in K-12 schools.

Subtitle F- Institutional Entities

Section 471- Energy Sustainability and Efficiency Grants and Loans for Institutions

This section authorizes \$250 million per year in 2009-13 for a DOE technical assistance and grants program, and \$500 million per year for direct loans, for energy-efficiency and sustainability projects, including combined heat and power, in public institutions.

Subtitle G- Public and Assisted Housing

Section 481- Application of International Energy Conservation Code to Public and Assisted Housing

This section updates criteria for new homes with VA and FHA insured mortgages and for new public housing to current national model codes.

Subtitle H- General Provisions

Section 491- Demonstration Project

This section directs the GSA office to do at least 6 green building demonstration projects at federal facilities, and the DOE office to do at least 4 at universities. This section also authorizes \$10 million each for FY2008-2012 for federal and university demonstration projects.

Section 492- Research and Development

This section directs the office to develop a research plan, and an indoor air quality program.

Section 493- EPA Demonstration Grant Program for Local Governments

This section authorizes \$20 million per year in FY2007-2012 for EPA grants to local governments for achieving 40% energy cost savings in their buildings.

Section 494- Green Building Advisory Committee

This section establishes a Green Building Advisory Committee to provide advice and expertise for use by the Federal Director in carrying out the duties of the High-Performance Federal Buildings.

Section 495- Advisory Committee on Energy Efficiency Finance

This section directs EERE to establish an advisory committee on energy-efficiency financing.

Title 5- Energy Savings in Government and Public Institutions

Subtitle A- United States Capitol Complex

Section 501- Capitol Complex Photovoltaic Roof Feasibility Studies

This section authorizes \$500 thousand for the Architect of the Capitol (AOC) to conduct a feasibility study regarding the construction of photovoltaic roofs for the Rayburn House and Hart Senate Office Buildings.

Section 502- Capitol Complex E-85 Refueling Station

This section authorizes \$640 thousand for FY08 for the AOC to construct a fuel tank and pumping system for E-85 fuel at or within close proximity of the Capitol Grounds Fuel Station to be used by all legislative branch vehicles capable of operation on E-85 fuel.

Section 503- Energy and Environmental Measures in Capitol Complex Master Plan

This section requires the AOC, to the maximum extent practicable, to include energy efficiency and conservation measures, greenhouse gas emission reduction measures, and other environmental measures in the Capitol Complex Master Plan.

Section 504- Promoting Maximum Efficiency in Operation of Capitol Power Plant

This section requires the AOC to take steps to operate the system boilers at the Capitol Power Plant in the most energy efficient manner possible to minimize carbon emissions and operating costs.

Section 505- Capitol Power Plant Carbon Dioxide Emissions Feasibility Study and Demonstration Projects

This section requires the AOC to conduct a feasibility study evaluating the available methods to capture, store, and use carbon dioxide emitted from the Capitol Power Plant as a result of burning fossil fuels.

If this study determines that a demonstration project to capture and store or use Capitol Power Plant carbon dioxide emissions is technologically feasible and economically justified, the AOC can conduct one or more demonstration projects to capture and store those emissions. This section authorizes \$3 million to carry out the study and demonstration project.

Subtitle B- Energy Savings Performance Contracting

Section 511- Authority to Enter into Contracts; Reports

This section eliminates the written notification of contract congressional notification requirement.

Section 512- Financing Flexibility

This section allows agencies to use any combination of appropriated funds and private financing for ESPCs.

Section 513- Promoting Long- Term Energy Savings Performance Contracts and Verifying Savings

This section clarifies allowed length of contracts under Super-ESPCs and bars agencies from capping the duration of ESPCs (below the 25-year legal limit) or the total obligations under ESPCs.

Section 514- Permanent Reauthorization

This section permanently extends authority to enter into ESPCs.

Section 515- Definition of Energy Savings

This section clarifies that cogeneration, renewable energy generation, and water savings can be included in ESPCs.

Section 516- Retention of Savings

This section removes previous law that amounts equal to fifty percent of the energy and water cost savings realized remain available for expenditure by the agency for additional energy efficiency measures.

Section 517- Training Federal Contracting Officers to Negotiate Energy Efficiency Contracts

This section authorizes a FEMP program to train federal contract officers in the use of ESPCs and other energy-efficiency contracts.

Section 518- Study of Energy and Cost Savings in Nonbuilding Applications

This section requests a joint DOE and Defense Department study of the potential use of ESPCs for non-building (mobile) applications.

Subtitle C- Energy Efficiency in Federal Agencies

Section 521- Installation of Photovoltaic System at DOE HQ Building

This section requires the GSA to install a photovoltaic system, from the Sun Wall Design Project, for the Forrestal Building. \$30 million, from the Federal Buildings Fund, is awarded to carry out this section.

Section 522- Prohibition on Incandescent Lamps by Coast Guard

This section bans use of incandescent lights by the Coast Guard, with some exceptions.

Section 523- Standard Relating to Solar Hot Water Heaters

This section requires that at least 30% of hot water demand in new or substantially modified federal buildings be met using solar hot water heaters, if life-cycle cost-effective.

Section 524- Federally-Procured Appliances with Standby Power

This section requires agencies to buy products that use 1 watt or less of standby power if cost-effective and practicable.

Section 525- Federal Procurement of Energy Efficient Products

This section requires the GSA and Defense Logistics Agency to list only Energy Star or FEMP designated products in their catalogues.

Section 526- Procurement and Acquisition of Alternative Fuels

This section prohibits federal agencies from entering into procurement contracts of alternative or synthetic fuel for any mobility-related use, other than for research or testing, unless the contract specifies that the lifecycle greenhouse gas emissions are less than or equal to emissions from the equivalent conventional fuel produced from conventional petroleum sources.

Section 527- Government Efficiency Status Reports

This section requires federal agencies to submit an annual efficiency status report to OMB, with the status of compliance on requirements made by this bill, the status of implementation on initiatives to improve energy efficiency, and the savings to the taxpayers resulting from the mandated improvements.

Section 528- OMB Government Efficiency Reports and Scorecards

This section directs OMB to submit an annual Government efficiency report to the House Committee on Oversight and Government Reform and the Senate Committee on Governmental Affairs.

Section 529- Electricity Sector Demand Response

This section directs FERC to assess demand response potential and develop a demand response action plan.

Subtitle D- Energy Efficiency of Public Institutions

Section 531- Reauthorization of State Energy Programs

This section reauthorizes the State Energy Program at \$125 million per year in 2007-2012.

Section 532- Utility Energy Efficiency Programs

This section requires state regulators to consider integrating energy efficiency into electric and natural gas utility plans and modifying rate structures to provide incentives for energy efficiency and to decouple returns from energy sales.

Subtitle E- Energy Efficiency and Conservation Block Grants

Section 542- Energy Efficiency and Conservation Block Grant Program

This section establishes the Energy Efficiency and Conservation Block Grant Program for the DOE to provide grants to implement strategies to reduce fossil fuel emissions created as a result of activities within the jurisdictions of eligible entities, to reduce the total energy use of eligibility entities, and improve energy efficiency in various sectors.

Section 543- Allocation of Funds

This section allocates the amounts of funds for grants for each fiscal year made by DOE to be 68 percent to eligible units of local governments, 28 percent to states, 2 percent to Indian tribes, and 2 percent for competitive grants.

Section 544- Use of Funds

This section states that grants received must be toward achieving the development of implementation of an energy efficiency and conservation strategy, retaining technical consultant services to assist the eligible entity in the development of such a strategy, development of methods to measure progress in achieving the goals, development and publication of annual reports to the population served by the eligible entity, development and implementation of programs to conserve energy used in transportation, development and implementation of building codes and inspection services to promote building energy efficiency, and various other purposes.

Section 545- Requirements For Eligible Entities

This section sets forth requirements that states, local governments, and Indian tribes must meet in order to be eligible for grants.

Section 546- Competitive Grants

This section sets forth that in order to be eligible to receive a portion of the 2 percent to be used for competitive grants, local governments must submit an application to DOE including a plan to carry out the functions in Section 544.

Section 547- Review and Evaluation

This section gives DOE the authority to review and evaluate the performance of each entity that receives a grant and the ability to withhold any portion of a grant if the entity has failed to achieve compliance with various guidelines.

Section 548- Funding

This section authorizes \$2 billion a year for FY08-FY12.

Title 6- Accelerated Research and Development

Subtitle A- Solar Energy

Section 601- Short Title

This section cites Subtitle 6 as the Solar Energy Research and Advancement Act of 2007.

Section 602- Thermal Storage Research and Development Program

This section establishes an R&D program to provide lower cost and more viable thermal energy storage technologies to enable the shifting of electric power loads on demand and to extend the operating time of concentrating solar power electric generating plants.

This section authorizes \$5 million for FY08, \$7 million for FY09, \$9 million for FY10, \$10 million for FY11, and \$12 million for FY12.

Section 603- Concentrating Solar Power Commercial Application Studies

This section directs DOE to conduct a study on methods to integrate concentrating solar power and utility-scale photovoltaic systems into regional electricity transmission systems, and to identify new transmission or transmission upgrades needed to bring electricity from high concentrating solar power resource areas to growing electric power load centers throughout the United States. The study shall analyze and assess cost-effective approaches for management and large-scale integration of concentrating solar power and utility-scale photovoltaic systems into regional electric transmission grids to improve electric reliability, to efficiently manage load, and to reduce demand on the natural gas transmission system for electric power and a report on the results of a study on methods to reduce the amount of water consumed by concentrating solar power systems.

Section 604- Solar Energy Curriculum Development and Certification Grants

This section establishes within the Office of Solar Energy Technologies a grant program to create and strengthen solar industry workforce training and internship programs in installation, operation, and maintenance of solar energy products. \$10 million every year for FY08-FY12 is authorized to carry out this section.

Section 605- Daylighting Systems and Direct Solar Light Pipe Technology

This section authorizes \$3.5 million each year for FY08-FY12 for DOE to establish a program of R&D to provide assistance in the demonstration and commercial application

of direct solar renewable energy sources to provide alternatives to traditional power generation for lighting and illumination, including light pipe technology, and to promote greater energy conservation and improved efficiency.

Section 606- Solar Air Conditioning Research and Development Program

This section authorizes \$2.5 million every year for FY08-FY12 for DOE to establish a research, development, and demonstration program to promote less costly and more reliable decentralized distributed solar-powered air conditioning for individuals and businesses.

Section 607- Photovoltaic Demonstration Program

This section requires DOE to establish a program of grants to States to demonstrate a advanced photovoltaic technology. In addition, this section authorizes \$15 million for FY08, \$30 million for FY09, \$45 million for FY10, \$60 million for FY11, and \$70 million for FY12.

Subtitle B- Geothermal Energy

Section 611- Short Title

This section cites this subtitle as the Advanced Geothermal Energy Research and Development Act of 2007.

Section 613- Hydrothermal Research and Development

This section requires DOE to support programs of research, development, demonstration, and commercial application to expand the use of geothermal energy production from hydrothermal systems, including advanced hydrothermal resource tools and industry coupled exploratory drilling.

Section 614- General Geothermal Systems Research and Development

This section requires DOE to support programs of research, development, demonstration, and commercial application of components and systems capable of withstanding extreme geothermal environments and necessary to cost-effectively develop, produce, and monitor geothermal reservoirs and produce geothermal energy; models of geothermal reservoir performance, with an emphasis on accurately modeling performance over time; and technologies and practices designed to mitigate or preclude potential adverse environmental impacts of geothermal energy development, production or use, and seek to ensure that geothermal energy development is consistent with the highest practicable standards of environmental stewardship.

Section 615- Enhanced Geothermal Systems Research and Development

This section requires DOE to support programs of research, development, demonstration, and commercial application for enhanced geothermal systems, including enhanced geothermal systems technologies and enhanced geothermal systems reservoir stimulation.

Section 616- Geothermal Energy Production From Oil and Gas Fields and Recovery and Production of Geopressed Gas Resources

This section requires DOE to implement a grant program in support of geothermal energy production from oil and gas fields for 3 demonstration projects of the use of geothermal techniques such as advanced organic rankine cycle systems at marginal, unproductive, and productive oil and gas wells.

Section 617- Cost Sharing

This section sets forth the federal share of costs projects.

Section 618- Center for Geothermal Technology Transfer

This section requires DOE to award a grant to an institution of higher education to establish a Center for Geothermal Technology Transfer. This Center for Geothermal Technology Transfer is required to serve as an information clearinghouse for the geothermal industry by collecting and disseminating information on best practices in all areas relating to developing and utilizing geothermal resources, make data collected by the Center available to the public, and seek opportunities to coordinate efforts and share information with domestic and international partners engaged in research and development of geothermal systems and related technology.

Section 619- Geopowering America

This section expands the DOE's GeoPowering the West program to extend its geothermal technology transfer activities through the entire United States. This section also renames the program as "GeoPowering America."

Section 620- Educational Pilot Program

This section requires DOE to seek to award grant funding, on a competitive basis, to an institute higher education for a geothermal-powered energy generation facility on campus. The purpose will be to provide electricity and space heating, and serve as an educational resource to students in a relevant field of study.

Section 621- Reports

This section requires DOE to report to Congress on advanced concepts and technologies to maximize the geothermal resource potential of the United States.

Section 622- Applicability of Other Laws

This section clarifies that nothing within this subtitle should be construed as waiving, modifying, or superseding the applicability of any requirement under any environmental or other Federal or State law.

Section 623- Authorization of Appropriations

This section authorizes \$90 million every year for FY08-FY12 for this Subtitle. Of this amount, \$10 million a year will be for geothermal energy production from oil and gas fields. In addition, \$5 million a year for 5 years is authorized for the Intermountain West Geothermal Consortium.

Section 624- International Geothermal Energy Development

This section requires DOE, in coordination with other appropriate Federal and multilateral agencies, to support international collaborative efforts to promote the research, development, and deployment of geothermal technologies used to develop hydrothermal and enhanced geothermal system resources. This section authorizes \$5 million a year for FY08-FY12.

Section 625- High Cost of Region Geothermal Energy Grant Program

This section requires DOE to make grants to eligible entities, with respect to geothermal energy projects in a high-cost region, to conduct feasibility studies, for design and engineering costs, and to demonstrate and promote commercial application of technologies related to geothermal energy as part of the project.

Subtitle C- Marine and Hydrokinetic Renewable Energy Technologies

Section 631- Short Title

This section cites this subtitle as the Marine and Hydrokinetic Renewable Energy Research and Development Act.

Section 632- Definition

This section defines ‘marine and hydrokinetic renewable energy’ as electrical energy from waves, tides, and currents in oceans, estuaries, and tidal areas; free flowing water in rivers, lakes and streams; free flowing water in man-made channels; and differentials in ocean temperature.

Section 633- Marine and Hydrokinetic Renewable Energy R&D

This section requires DOE, in consultation with Interior and Commerce, to establish a program of research and development, demonstration, and commercial application to expand marine and hydrokinetic renewable energy production.

Section 634- National Marine Renewable Energy Research, Development, and Demonstration Centers

This section requires DOE to award grants to institutions of higher education for the establishment of 1 or more National Marine Renewable Energy Research, Development, and Demonstration Centers. These centers are for advancing research, development, demonstration, and commercial application of marine renewable energy, and will serve as an information clearinghouse for the marine renewable energy industry, collecting and dissemination information on best practices in all areas related to developing and managing enhanced marine renewable energy systems resources.

Section 635- Applicability of other Laws

This section clarifies that nothing in this subtitle should be understood to waive, modify, or supersede the applicability of any requirement under any environmental, or other Federal or State law.

Section 636- Authorization of Appropriations

This section authorizes \$50 million every year for FY08-FY12 for activities under this subtitle, excluding those receiving funds for ocean energy, including wave energy.

Subtitle D- Energy Storage for Transportation and Electric Power

Section 641- Energy Storage Competitiveness

This section authorizes up to \$230 million per year in 2008-2017 for a DOE RD&D program on energy storage systems for motor transportation and electricity transmission and distribution, with an addition \$65 million per year for demonstration programs for energy storage systems, vehicle energy storage, and reuse and disposal of vehicle batteries.

Subtitle E- Miscellaneous Provisions

Section 651- Lightweight Materials Research and Development

This section authorizes \$80 million per year in FY08-FY12 for DOE R&D on lightweight materials for vehicles.

Section 652- Commercial Insulation Demonstration Program

This section authorizes a demonstration program for advanced insulation for commercial refrigeration.

Section 653- Technical Criteria for Clean Coal Power Initiative

This section amends the Energy Policy Act of 2005 by amending the provision that states that DOE establish periodic milestones so as to achieve by 2020 coal gasification projects able to remove at least 99 percent of sulfur dioxide or to emit not more than 0.04 pound SO₂ per million Btu, based on a 30-day average.

Section 654- H-Prize

This section amends the Energy Policy Act of 2005 to require the DOE to carry out a program to competitively award cash prizes to advance the research, development, demonstration, and commercial application of hydrogen energy technologies. This section authorizes for FY08-FY17, \$20 million for advancements in technologies, components, or systems related to hydrogen production, hydrogen storage, hydrogen distribution, and hydrogen utilization; \$20 million for prototypes of hydrogen-powered vehicles or other hydrogen-based products that best meet or exceed objective performance criteria; and \$10 million for transformational changes in technologies for the distribution or production of hydrogen that meet or exceed far-reaching objective criteria.

Section 655- Bright Tomorrow Lighting Prizes

This section directs DOE to establish Bright Tomorrow Lighting Prizes for development of solid-state lighting that meets specified criteria.

Section 656- Renewable Energy Innovation Manufacturing Partnership

This section authorizes \$25 million per year for FY08-FY12 for DOE to carry out a program, known as the Renewable Energy Innovation Manufacturing Partnership Program, to make assistance awards for use in carrying out research, development, and demonstration relating to the manufacturing of renewable energy technologies.

Title 7- Carbon Capture and Sequestration

Subtitle A- Carbon Capture and Sequestration Research, Development, and Demonstration

Section 701- Short Title

This section cites that this subtitle be named the Department of Energy Carbon Capture and Sequestration Research, Development, and Demonstration Act of 2007.

Section 702- Carbon Capture and Sequestration Research, Development, and Demonstration Program

This section adds sequestration research, development, and demonstration to the list of programs that DOE must carry out a 10-year carbon capture research and development program. This section is funded through the authorization of \$240 million per year for FY08-FY12.

Section 703- Carbon Capture

This section authorizes \$200 million per year for FY09-FY13 for DOE to carry out a program to demonstrate technologies for the large-scale capture of carbon dioxide from industrial sources.

Section 704- Review of Large-Scale Programs

This section requires DOE to enter into an arrangement with the National Academy of Sciences for an independent review and oversight, beginning in 2011, of sequestration and carbon capture projects to ensure that the benefits of these programs are maximized.

Section 705- Geologic Sequestration Training and Research

This section requires DOE to enter into an arrangement with the National Academy of Sciences to undertake a study that defines an interdisciplinary program in geology, engineering, hydrology, environmental science, and related disciplines that will support the Nation's capability to capture and sequester carbon dioxide from anthropogenic sources; addresses undergraduate and graduate education, especially to help develop graduate level programs of research and instruction that lead to advanced degrees with emphasis on geologic sequestration science; develops guidelines for proposals from colleges and universities with substantial capabilities in the required disciplines that seek to implement geologic sequestration science programs that advance the Nation's capacity to address carbon management through geologic sequestration science; and outlines a budget and recommendations for how much funding will be necessary to establish and carry out the grant program through which colleges and universities may apply for a receive 4-year grants for salary and startup costs for newly designated faculty positions in

an integrated geologic carbon sequestration science program; and internships for graduate students in geologic sequestration science

Section 706- Relation to Safe Drinking Water Act

This section states that all geologic sequestration of carbon dioxide are subject to the Safe Drinking Water Act.

Section 707- Safety Research

This section authorizes \$5 million per year for EPA to conduct a research program to address public health, safety, and environmental impacts that may be associated with capture, injection, and sequestration of greenhouse gases in geologic reservoirs.

Section 708- University Based Research and Development Grant program

This section authorizes \$10 million for DOE, with other agencies, to establish a university based research and development program to study carbon capture and sequestration using various types of coal, with special consideration to rural and agricultural based institutions.

Subtitle B- Carbon Capture and Sequestration Assessment and Framework

Section 711- Carbon Dioxide Sequestration Capacity Assessment

This section authorizes \$30 million per year for FY08-FY12 for DOE, within 1 year, to develop a methodology for conducting an assessment of capacity for carbon dioxide. This assessment must take into consideration the geographical extent of all potential sequestration formations in all States; the capacity of the potential sequestration formations; the rate and pressure [at which carbon dioxide can be pumped](#); an estimate of potential volumes of oil and gas recoverable by injection and sequestration of industrial carbon dioxide in potential sequestration formations; the risk associated with the potential sequestration formations; and the work done to develop the Carbon Sequestration Atlas of the United States and Canada that was completed by the Department.

Section 712- Assessment of Carbon Sequestration and Methane and Nitrous Oxide Emissions from Ecosystems

This section requires that 2 years after the final methodology from Section 711 is published, the DOE shall complete a national assessment of the quantity of carbon stored in and released from ecosystems, including from man-caused and natural fires; and the annual flux of covered greenhouse gases in and out of ecosystems. This section authorizes \$20 million for FY08-FY12.

Section 713- Carbon Dioxide Sequestration Inventory

This section amends the Energy Policy Act of 2005 by adding a provision that requires Interior, through the Bureau of Land Management, to maintain records on, and an inventory of, the quantity of carbon dioxide stored within Federal mineral leaseholds.

Section 714- Framework for Geological Carbon Sequestration on Public Land

This section requires Interior to submit a report to Congress on a recommended framework for managing geological carbon sequestration activities on public land.

Title 8- Improved Management of Energy Policy

Subtitle A- Management Improvements

Section 801- National Media Campaign

This section authorizes \$5 million per year in 2008-2012 for a DOE national media campaign to increase energy efficiency and reduce oil consumption.

Section 802- Alaska Natural Gas Pipeline Administration

This section amends the Alaska Natural Gas Pipeline Act to give the Federal Coordinator the authority to appoint and terminate personnel deemed appropriate and authorizes other official duties and responsibilities.

Section 803- Renewable Energy Deployment

This section requires DOE to make grants for use in carrying out renewable energy projects.

Section 804- Coordination of Planned Refinery Outages

This section requires the EIA Administrator to review and analyze available information with regard to planned refinery outages. If the refinery outage may affect the price or supply of a refined petroleum product, DOE is required to make available to refinery operators information on planned refinery outages to encourage reductions of the quantity of refinery capacity that is out of service at any time.

Section 805- Assessment of Resources

This section requires the EIA Administrator to establish a 5-year plan to enhance the quality and scope of the data collection necessary to ensure the scope, accuracy, and timeliness of the information needed for efficiency functioning of energy markets and related financial operations. This section authorizes \$10 million per year for FY08-FY10, \$15 million for FY11, \$20 million for FY12, and additional sums necessary in subsequent fiscal years.

Section 806- Sense of Congress Relating to the use of Renewable Resources to Generate Energy

This section expresses the sense of Congress that domestic renewable sources of energy should provide 25% of energy consumed in the U.S. by 2025.

Section 807- Geothermal Assessment, Exploration Information, and Priority Activities

This section requires the Department of Interior, acting through the Director of the U.S. Geological Survey to complete a comprehensive nationwide geothermal resource assessment that examines the full range of geothermal resources in the United States and

submit a report on that assessment. This section authorizes \$15 million per year for FY08-FY12 and additional funds for FY13-FY22.

Subtitle B- Prohibitions on Market Manipulation and False Information

Section 811- Prohibition on Market Manipulation

This section makes it unlawful for any person, directly or indirectly, to use or employ, in connection with the purchase or sale of crude oil gasoline or petroleum distillates at wholesale, any manipulative or deceptive device or contrivance, in contravention of such rules and regulations as the Federal Trade Commission may prescribe as necessary or appropriate in the public interest or for the protection of United States citizens.

Section 812- Prohibition on False Information

This section makes it unlawful to report false information related to the wholesale price of crude oil gasoline or petroleum distillates.

Section 813- Enforcement by the Federal Trade Commission

This section gives the Federal Trade Commission enforcement authority over this subtitle

Section 814- Penalties

This section states that in addition to penalties deemed by the FTC to be appropriate, any violation will be punishable by a \$1 million civil penalty.

Section 815- Effect on Other Laws

This section clarifies that nothing in this subtitle limits or affects the FTC's authority to bring an enforcement action on the law.

Title 9- International Energy Programs

Subtitle A- Assistance to Promote Clean and Efficient Energy Technologies in Foreign Countries

Section 911- United States Assistance for Developing Countries

This section authorizes \$200 million per year in 2008-2012 for the U.S. Agency for International Development to support clean and efficient energy technologies assistance.

Section 912- United States Exports and Outreach Programs for India, China, and other Countries

This section directs the Department of Commerce through the United States and Foreign Commercial Service to promote U.S. exports in clean and efficient energy to India, China, and other countries.

Section 913- United States Trade Missions to Encourage Private Sector Trade and Investment

This section directs the Department of Commerce to direct the International Trade Administration to organize related trade missions to and from the United States to encourage private sector trade and investment in clean and efficient energy technologies.

Section 914- Actions by Overseas Private Investment Corporation

This section encourages the Overseas Private Investment Corporation to promote clean and efficient energy technologies.

Section 915- Actions by United States Trade and Development Agency

This section encourages the U.S. Trade and Development Agency to promote clean and efficient energy technologies.

Section 916- Deployment of International Clean and Efficient Energy Technologies and Investment in Global Energy Markets

This section establishes an interagency task force on international clean energy, and working group and center on clean energy exports.

Section 917- United States-Israel Energy Cooperation

This section requires DOE to establish a grant program, in implementing the ‘Agreement between the Department of Energy of the United States of America and the Ministry of Energy and Infrastructure of Israel Concerning Energy Cooperation,’ to support research, development, and commercialization of renewable energy or energy efficiency.

Subtitle B- International Clean Energy Foundation

Section 922- Establishment and Management of Foundation

This section establishes within the executive branch an ‘International Clean Energy Foundation.’

Section 923- Duties of Foundation

This section sets forth the official duties of the foundation, including making grants to promote projects outside the U.S. that serve as models on how to reduce emissions of global greenhouse gases, seek contributions from foreign governments to supplement other funds, harness global expertise towards innovative models that can be instituted to reduce global greenhouse gas emissions, and others.

Section 924- Annual Report

This section requires the Foundation to submit a report to Congress on the implementation of this subtitle.

Section 925- Powers of the Foundation; Related Provisions

This section sets forth the powers of the Foundation, including perpetual succession unless dissolved by law, the adoption of a seal, the ability to purchase or lease property, and others.

Section 926- General Personnel Authorities

This section includes general personnel rights and authority

Section 927- Authorization of Appropriations

This section authorizes \$20 million per year for FY09-FY13.

Subtitle C- Miscellaneous Provisions

Section 931- Energy Diplomacy and Security Within the Department of State

This section establishes within the State Department, a Coordinator for International Energy Affairs to represent State in developing the international energy policy of the United States, ensuring the analyses of the national security implications of global energy and environmental developments, and others.

Section 932- National Security Council Reorganization

This section amends the National Security Act of 1947 to include the Secretary of Energy within the National Security Council.

Section 933- Annual National Energy Security Strategy Report

This section requires the President, when submitting his annual budget, to also submit a report on the national energy security of the United States.

Section 934- Convention on Supplementary Compensation for Nuclear Damage Contingent Cost Allocation

This purpose of this section is to allocate the contingent costs association with participation by the United States in the international nuclear liability compensation system.

Section 935- Transparency in Extractive Industries Resource Payments

This section authorizes \$3 million for the United States to contribute to the Multi-Donor Trust Fund of the EITA.

Title 10- Green Jobs

Section 1001- Short Title

This section cites this title as the ‘Green Jobs Act of 2007.’

Section 1002- Energy Efficiency and Renewable Energy Worker Training Program

This section authorizes a Department of Labor energy efficiency and renewable energy worker training program, including grants to industry-labor partnerships and to states, and tracking workforce trends.

Title 11- Energy Transportation and Infrastructure

Subtitle A- Department of Transportation

Section 1101- Office of Climate Change and Environment

This section establishes within DOT an Office of Climate Change and Environment to plan, coordinate, and implement research, strategies, and actions under their authority to reduce transportation-related energy use and mitigate the effects of climate change.

Subtitle B- Railroads

Section 1111- Advanced Technology Locomotive Grant Pilot Program

Authorizes \$10 million per year for FY08-FY11 for DOT, in consultation with EPA, to establish and carry out a pilot program for making grants to railroad carriers for assistance in purchasing hybrid other energy-efficiency locomotives and to demonstrate the extent to which such locomotives increase fuel economy, reduce emissions, and lower costs of operation.

Section 1112- Capital Grants for Class II and Class III Railroads

This section authorizes \$250 million per year in 2008-2011 for railroad track work.

Subtitle C- Marine Transportation

Section 1121- Short Sea Transportation Initiative

This section amends current law to establish a short sea transportation program and designate short sea transportation projects to mitigate landside congestion.

Section 1122- Short Sea Shipping Eligibility for Capital Construction Fund

This section amends current law to include short sea transportation trade as a qualified vessel.

Section 1123- Short Sea Transportation Report

This section requires DOT, with EPA, to submit a report to Congress on the short sea transportation program established under this section.

Subtitle D- Highways

Section 1131- Increased Federal share for CMAQ Projects

This section increases the federal share payable for Certain Safety Projects for FY08-FY09 to be no less than 80 percent, and at the discretion of the State, up to 100 percent of the cost.

Section 1132- Distribution of Rescissions

This section states that any unobligated balances appropriated from the Highway Trust Fund shall be distributed by DOT within each state among all programs for which funds are apportioned to the extent sufficient funds remain available for obligation.

Section 1133- Sense of Congress Regarding Use of Complete Streets Design Techniques

This section expresses the sense of Congress that in constructing new roadways or rehabilitating existing facilities, state and local governments should consider policies designed to accommodate all users, including motorists, pedestrians, cyclists, transit riders, and people of all ages and abilities.

Title 11- Small Business Energy Programs

Section 1201- Express Loans for Renewable Energy and Energy Efficiency

This section authorizes loans for renewable energy systems and energy efficiency projects under the Express Loan Program of the Small Business Administration (SBA).

Section 1202- Pilot Program for Reduced 7(a) Fees for Purchase of Energy Efficient Technologies

This section requires the EPA to establish and carry out a pilot program under which the Administrator shall reduce the fees for covered energy efficiency loans.

Section 1203- Small Business Energy Efficiency

This section directs SBA to establish a small business energy-efficiency education program authorized in Sec. 132 of Energy Policy Act of 2005 and a new program to provide energy-efficiency assistance through small business development centers.

Section 1204- Larger 504 Loan Limits to Help Business Develop Energy Efficient Technologies and Purchases

This section increases loan limit for SBA “504-CDC” loans for projects that reduce energy use by at least 10%, use sustainable design, or produce renewable energy or fuels.

Section 1205- Energy Saving Debentures

This section authorizes new small business investment companies to issue Energy Saving debentures.

Section 1206- Investments in Energy Saving Small Businesses

This section excludes the investments made from Section 1205 from SBA calculations of company leverage.

Section 1207- Renewable Fuel Capitol Investment Company

This section establishes a Renewable Fuel Capitol Investment Program to promote the research, development, manufacture, production, and bringing to market of goods, products, or services that generate or support the production of renewable energy by encouraging venture capitol investments in smaller enterprises and to establish a venture capitol program, with the mission of addressing the unmet equity investment needs of smaller enterprises engaged in these activities. This section authorizes \$15 million in operational assistance grants for FY08 and FY09.

Title 13- Smart Grid

Section 1301- Statement of Policy on Modernization of Electricity Grid

This section establishes it the policy of the United States to support the modernization of the Nation's electricity transmission and distribution system to maintain a reliable and secure electricity infrastructure that can meet future demand growth and to achieve other goals and measures.

Section 1302- Smart Grid System Report

This section requires DOE to report to Congress concerning the status of smart grid deployments nationwide and any regulatory or government barriers to continued deployment.

Section 1303- Smart Grid Advisory Committee and Smart Grid Task Force

This section requires DOE to establish a Smart Grid Advisory Committee to advise the Secretary and others concerning the development of smart grid technologies, the progress of a national transition to the use of smart-grid technologies and services, the evolution of widely-accepted technical and practical standards and protocols to allow interoperability and inter-communication among smart-grid capable devices, and the optimum means of using Federal incentive authority to encourage such progress.

Section 1304- Smart Grid Technology Research, Development, and Demonstration

This section authorizes DOE Smart Grid RD&D program, including \$100 million per year in 2008-2012 for demonstration projects.

Section 1305- Smart Grid Interoperability Framework

This section directs the National Institute of Standards and Technology to develop a framework for the connection of smart grid devices and systems, and FERC to adopt such standards and protocols.

Section 1306- Federal Matching Fund for Smart Grid Investment Costs

This section authorizes funds for a DOE matching grant program for one-fifth of Smart Grid investment costs.

Section 1307- State Consideration of Smart Grid

This section requires state regulators to consider requiring and funding smart grid investments.

Section 1308- Study of the Effect of Private Wire Laws on the Development of Combined Heat and Power Facilities

This section requires the DOE, in consultation with the States and other entities, to conduct a study of the laws and regulations affecting the siting of privately owned electric distribution wires on and across public rights-of-way.

Section 1309- DOE Study of Security Attributes of Smart Grid Systems

This section requires the DOE to submit a report to Congress that provides a quantitative assessment and determination of the existing and potential impacts of the deployment of Smart Grid systems on improving the security of the Nation's electricity infrastructure and operating capability.

Title 14- Pool and Spa Safety**Section 1401- Short Title**

This section cites this title as the 'Virginia Graeme Baker Pool and Spa Safety Act.'

Section 1402- Findings

This section sets forth findings by Congress on injury-related deaths with regard to swimming pool drowning.

Section 1404- Federal Swimming Pool and Spa Drain Cover Standard

This section requires public pools and spas to be equipped with anti-entrapment devices or systems, to have a single main drain other than an unblockable drain, and is required to meet the requirements of any ASME/ANSI or ASTM performance standard.

Section 1405- State Swimming Pool Safety Grant Program

This section establishes and authorizes \$2 million each year for FY09 and FY10 for a grant program to provide assistance to state to hire and train enforcement personnel for implementation and enforcement of standards under the State swimming pool and spa safety law.

Section 1406- Minimum State Law Requirements

This section sets the minimum state law requirements for pool and spa safety.

Section 1407- Education Program

This section establishes and authorizes \$5 million per year for FY08-FY12 for an education program to inform the public of methods to prevent drowning and entrapment in swimming pools and spas.

Section 1408- CPSC Report

This section requires the Consumer Product Safety Commission to submit to Congress a report evaluating the implementation of the grant program established in Section 1405.

Title 15- Revenue Provisions**Section 1500- Amendment of 1986 Code**

This section states that except as express, whenever this title is amended or a section repeals, that the reference be considered to be made to a section or other provision of the Internal Revenue Code of 1986.

Section 1501- Extension of Additional 0.2 Percent FUTA Surtax

This section extends the Federal Unemployment tax of 6.2% for one additional year to 2008 and begins the 6.0% Federal Unemployment Tax in 2009.

Section 1502- 7-year Amortization of Geological and Geophysical Expenditures for Certain Major Integrated Oil Companies

This section changes the amortization of expenditures from 5-years to 7-years.

Title 16- Effective Date

Section 1601- Effective Date

This section states that this bill will take effect the day after enactment.